

REMARKS

Claims 1-17 are all of the pending claims, with claim 1 being the sole independent claim.

I. Specification:

Although not objected to by the Examiner, Applicants amend the specification to correct typographical and grammatical errors.

II. Title:

Applicants amend the title of the invention to be more descriptive of the claimed invention. If further changes to the title are believed to be necessary, Applicants look forward to receiving any amendment suggestions the Examiner may care to offer.

III. Claim Rejections Under 35 U.S.C. § 112(2nd):

The Examiner rejects claims 4, 5, 9, 10, and 13 under 35 U.S.C. § 112(2nd) because claims 4, 5, and 9 recite the term "the application," which lacks proper antecedent basis in the preceding claims. Applicants appropriately amend the claims to address the Examiner's concerns. Namely, the objectionable term has been deleted in favor of reciting --an application--.

Applicants respectfully submit that the amended claims more particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming the raised rejection under 35 U.S.C. § 112(2nd).

IV. Claim Rejection on Prior Art Grounds:

The Examiner rejects claims 1-17 under 35 U.S.C. § 103(a) as being obvious over U.S. 6,519,720 to Mores ("Mores") in view of U.S. 6,091,527 to

Brisse et al. ("Brisse"). Applicants respectfully traverse this rejection in view of the following remarks.

The present invention is directed to a system in which a bus master and at least one bus slave transmit digital signals to each other over a bus line. According to independent claim 1, each of the transmitted digital signals is interpreted as a logic zero when "*a first predetermined current waveform*" is applied to the bus line, and as a logic one when "*a second predetermined current waveform*" is applied to the bus line. That is, the logical state of the bus system is determined by an electric current. An exemplary, non-limiting embodiment of the current waveforms is depicted in Fig. 3. Here, a first current waveform (defined by an electric current at a level I_0 being applied during a time period T_0) is interpreted as a logic zero, while a second waveform (defined by an electric current at a level I_0 being applied during a time period T_1) is interpreted as a logic one.¹ In this embodiment, the current waveforms have different widths (i.e., $T_1 > T_0$) that allow the two waveforms to be distinguished from each other. At least the current waveform feature (as recited in claim 1), in combination with the other features defined by claim 1, is not taught or suggested by the prior art relied upon by the Examiner.

The Examiner relies upon Mores to teach most of the features of the present invention, except for the first and the second current waveforms defined by claim 1. Therefore, the Examiner looks to Brisse to allegedly teach current waveforms. Applicants respectfully submit that this rejection position is incorrect for the following reasons.

¹ Spec., paragraph bridging p. 4-5.

A. The Articulated Motivation is in Error:

It is well settled that the Examiner bears the initial burden of factually supporting a *prima facie* case of obviousness. Such factual support includes pointing out the suggestion or motivation to combine the reference teachings. The suggestion may be found in the references themselves or in the knowledge generally available to the skilled artisan. In the situation at hand, however, the Examiner has not carried the initial burden, and therefore Applicants are not obligated to submit evidence of nonobviousness.

Specifically, the Examiner concludes that those skilled in the art would have been motivated to implement the alleged modification/combination "because it would reduce the power consumption of the battery." This is simply not understood, however, because both references indicate express objectives of reducing power consumption. There is no apparent reason why one skilled in the art would expect that Brisse's teachings could somehow be implemented in Mores' system to achieve further reductions in power consumption. Accordingly, Applicants respectfully request the Examiner to clarify the rejection position by indicating exactly how the modified device would achieve better performance. Otherwise, the rejection seems to be based on an impermissible hindsight of the present application.

B. The Examiner's Reliance Upon Brisse is Misplaced:

Applicants respectfully submit that Brisse does not teach the features upon which the Examiner relies to reject claim 1. This is because Brisse's bus system is **not** current driven.

Brisse's disclosure is straightforward and explicit regarding the signals that are transmitted by the bus system. Indeed, and with reference to Fig. 2 of Brisse, the system includes modules 7, 8 that are interconnected via an

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“optical” bus.² By definition, an “optical” bus transmits optical (light) signals, not electrical signals. An optical signal does not involve “current,” which refers to the movement of electrical charges in a conductor. A “current” waveform is defined by an electrical signal (not an optical signal).

Turning to the next point, the Examiner cites portions of Brisse as allegedly teaching “current” waveforms. The cited portion of Brisse (i.e., 6:36 – 7:11) explains signal timing with reference to Fig. 3. As shown in Fig. 3, the signals do define waveforms. However, as noted above, the waveforms are for optical (light) signals, not an electrical signal. Accordingly, the waveforms illustrated in Fig. 3 are not comparable to the “current” waveforms defined by claim 1.

Accordingly, even if combined in the manner suggested by the Examiner, the prior art would not meet each and every feature of the invention defined by claim 1.

For these reasons, Applicants respectfully assert that claim 1 is patentable, and that claims 2-17 are patentable at least by virtue of their dependencies.

² Brisse (4:57-60).

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Amendment and Petition for Extension of Time
U.S. Appln. No. 09/788,498
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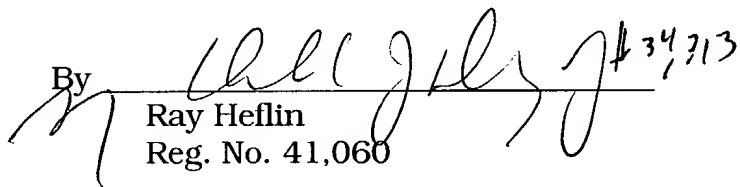
CONCLUSION

In the event that any matters remain at issue in the application, the Examiner is invited to contact the undersigned at (703) 668-8000 in the Northern Virginia area, for the purpose of a telephonic interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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